



# CPSC203 – Introduction to Problem Solving and Using Application Software

Fall 2009

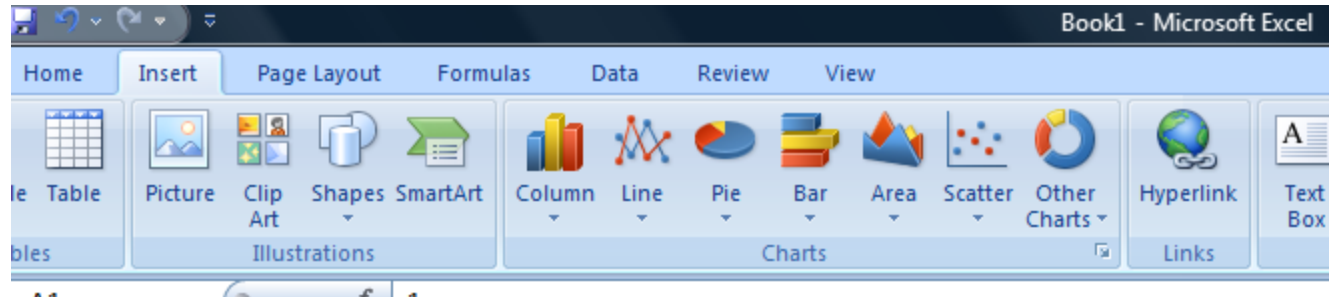
Tutorial 25, Mehrdad Nurolahzade

# Introduction

- Creating a chart using Chart Wizard.
- Customizing a chart.
- Good chart design principles.

# Chart Wizard (1)

- **Step 1:** In the top menu bar, select **Insert**. You should now see a group of icons labeled **Charts**.

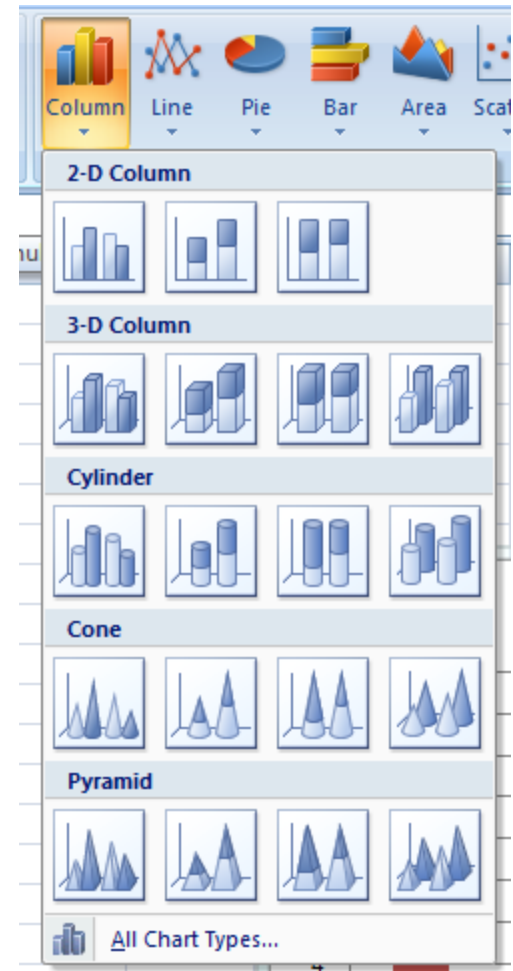


- **Step 2:** Select the data to be included in the chart.

	A	B
1		Budget
2	2004	12
3	2005	13.5
4	2006	15
5	2007	14.2
6	2008	17
7		

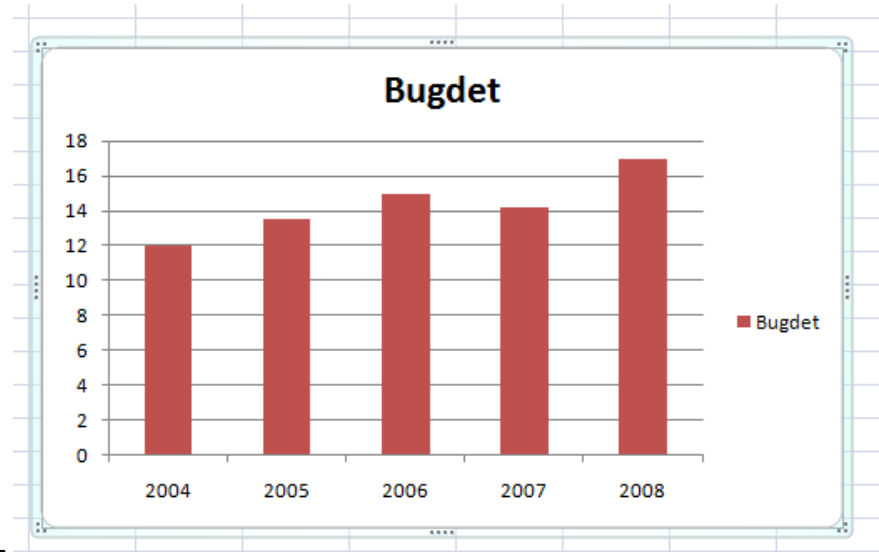
# Chart Wizard (2)

- **Step 3:** Select a chart type. A drop down menu should appear showing the different types of charts available. Select one of the types available.



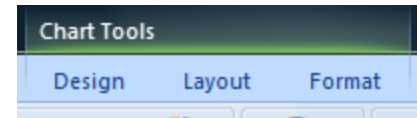
# Chart Wizard (3)

- **Step 4:** A new chart should have been added to your current worksheet. You can move the new chart by clicking-and-dragging it to a new location in the worksheet.



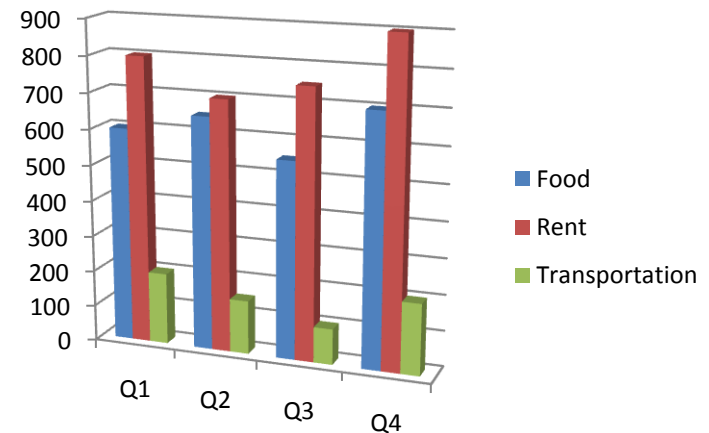
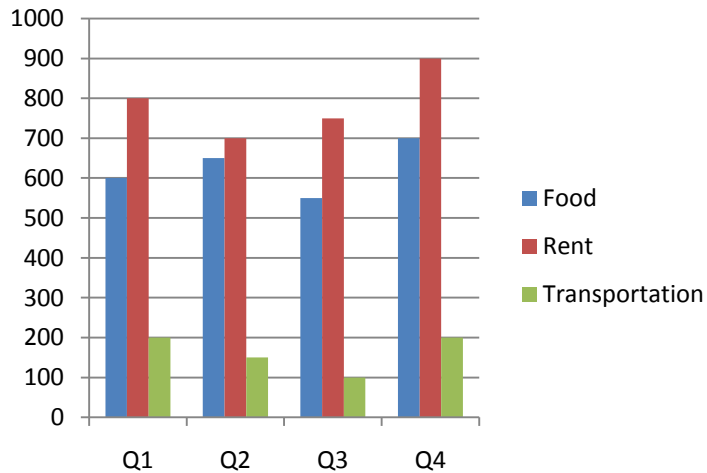
# Chart Wizard (4)

- **Step 5:** Notice that new contextual menus have appeared under the main toolbar. These contextual menus allows for customization to be performed to the chart.

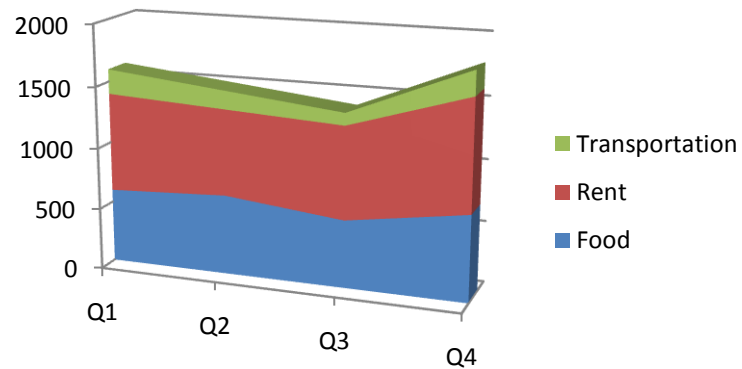
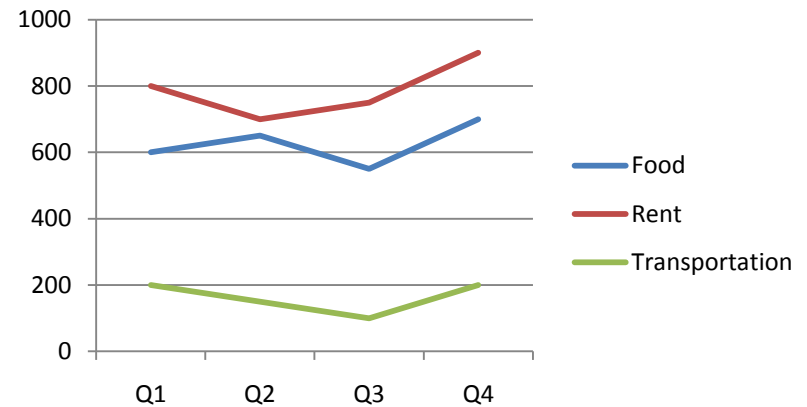
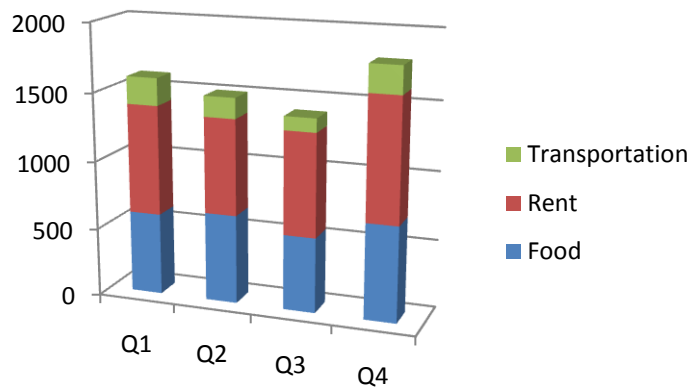


# Chart Types (1)

	A	B	C	D	E
1		<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
2	<b>Food</b>	600	650	550	700
3	<b>Rent</b>	800	700	750	900
4	<b>Transportation</b>	200	150	100	200



# Chart Types (2)





# Customizing a Chart (1)

- Chart elements:
  - chart area
  - plot area
  - data source
  - horizontal/vertical axis
  - legend
  - title
  - data label

# Customizing a Chart (2)

- **Step 1:** Select the chart.
- **Step 2a:** The **Chart Tools** menu is added to the menu bar with the three items: **Design**, **Layout**, and **Format**; Or
- **Step 2b:** Right-click a chart element and select **Format <element name>** from the drop down menu.

# Chart Design Principals (1)

- 6 principals of visual display of information according to Edward Tufte:
  - Maximize Data Ink
  - Minimize Chart Junk
  - Use Small Multiples to deal with Complexity
  - Data Density
  - Multiple Use
  - Aesthetics

# Chart Design Principals (2)

Stephen Few's 13 Mistakes in Dashboard Design:

1. Exceeding the Boundaries of a Single Screen
2. Supplying Inadequate Context for the Data
3. Displaying Excessive Detail or Precision
4. Choosing a Deficient Measure
5. Choosing an Inappropriate Display Media
6. Introducing Meaningless Variety
7. Using Poorly Designed Display Media
8. Encoding Quantitative Data Inaccurately
9. Arranging the Data Poorly
10. Highlighting Important Data Ineffectively or Not at All
11. Cluttering the Display with Useless Decoration
12. Misusing or Overusing Color
13. Designing an Unattractive Visual Display